

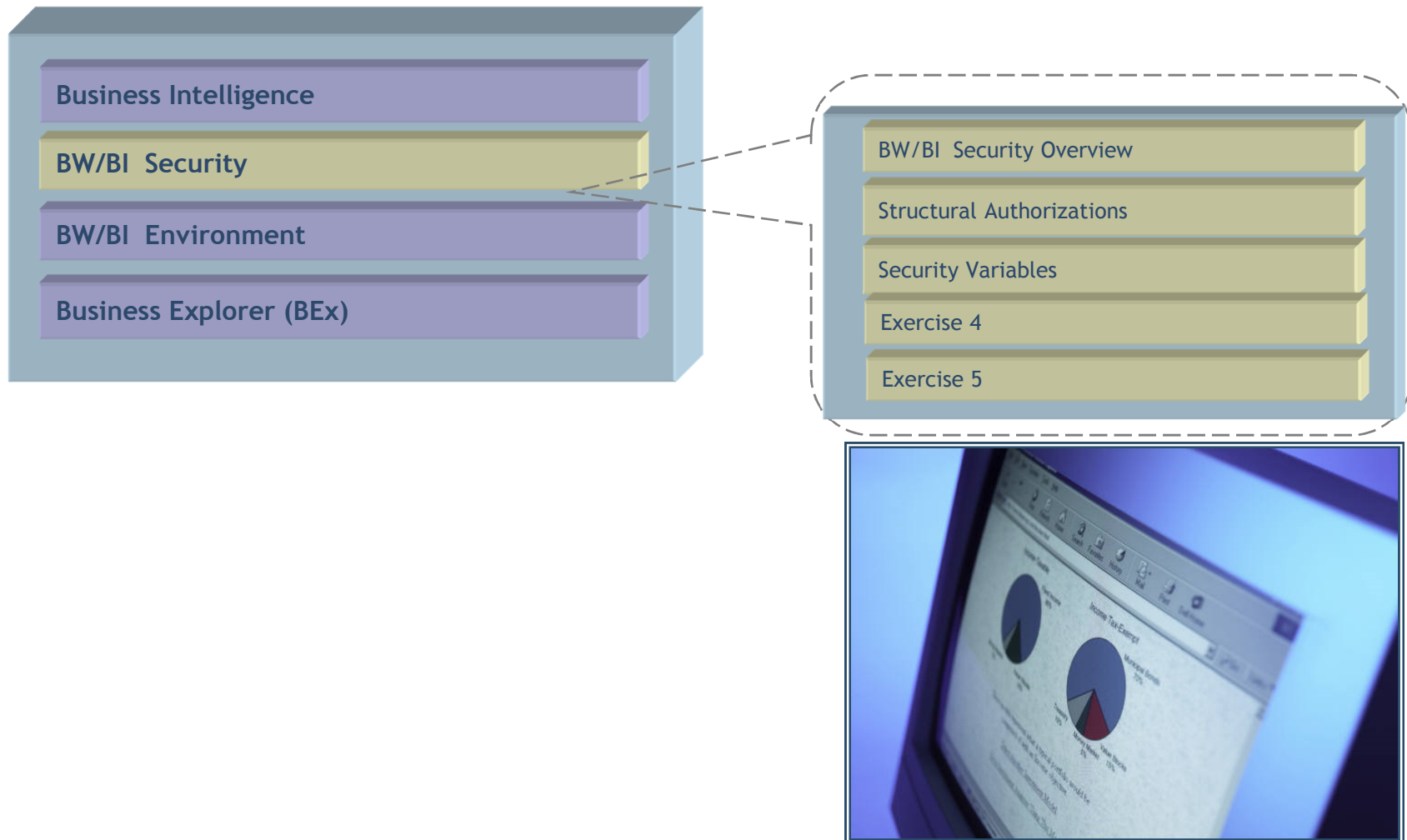
SAP Business Warehouse/Business Intelligence Reporting

BW/BI Security

Washington State HRMS Business
Warehouse/Business Intelligence (BW/BI)
BW/BI Power User Workshop Materials
General Topics - BW/BI Power Users

BW/BI Security

The following section provides an overview of BW/BI Security.



BW/BI Security Overview

The ability to access BW/BI reports, specific functions, and data within the BW/BI environment is controlled by HRMS BW/BI Security:

1. BW/BI User Role - The ability to access specific functions in BW/BI is controlled through roles. Agency HRMS BW/BI users will be mapped to either a “BW/BI End User” or “BW/BI Power User” role. All BW/BI users can access reports via the HRMS Portal. Only Power Users can develop ad hoc queries against data available within the BW/BI structures.
2. BW/BI InfoProvider Role - The ability to access BW/BI data structures (InfoProviders) is controlled by a BW/BI InfoProvider Role. Agency HRMS BW/BI users will be mapped to either an “HR/Payroll/Time data” - or - “HR/Payroll/Time with Financial data” - or - “Financial data only” - or - “HR/Payroll/Time with Grievance data” - or - “Grievance data only” InfoProvider Role.
3. BW/BI Data Security - The ability to access report results is controlled through the organization structure within the security and role mapping setups. BW/BI data structures apply an additional level of data security for specific values such as SSN, Name, etc.



Structural Authorizations

BW/BI Data Security

BW/BI Data Security is based on Structural Authorizations.

- Structural Authorizations are defined in HRMS (SAP R/3) and are loaded to the BW/BI on a nightly basis. Structural Authorizations restrict the display of data based on the user's organization structure within the security and role mapping setups.
- Some InfoObjects within BW/BI are considered confidential (for example, SSN and Name). BW/BI Security will check Structural Authorizations to ensure the user receives results for only the data they have access to.

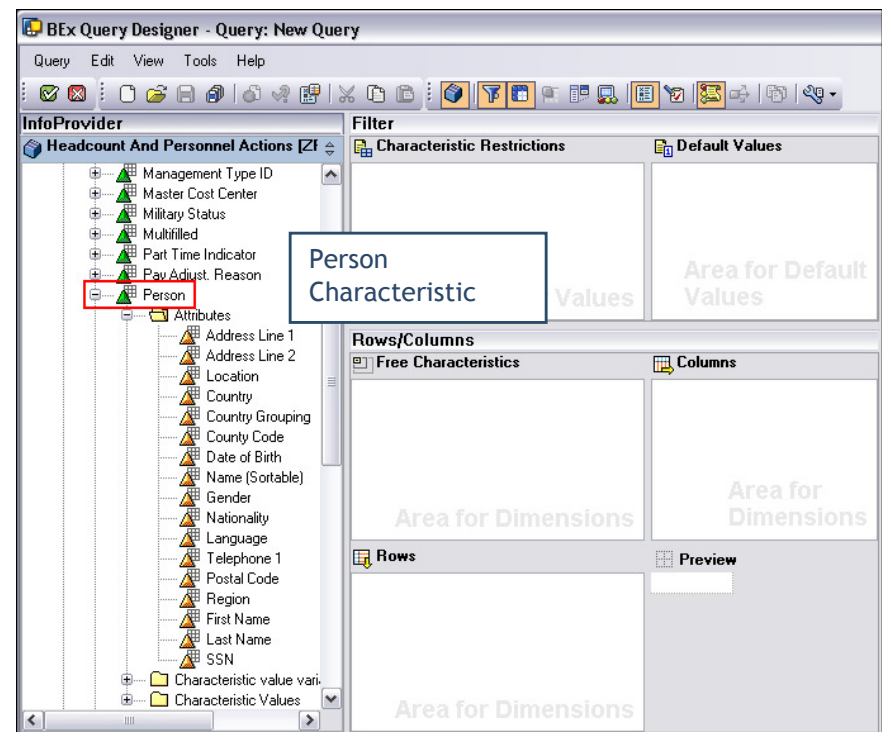
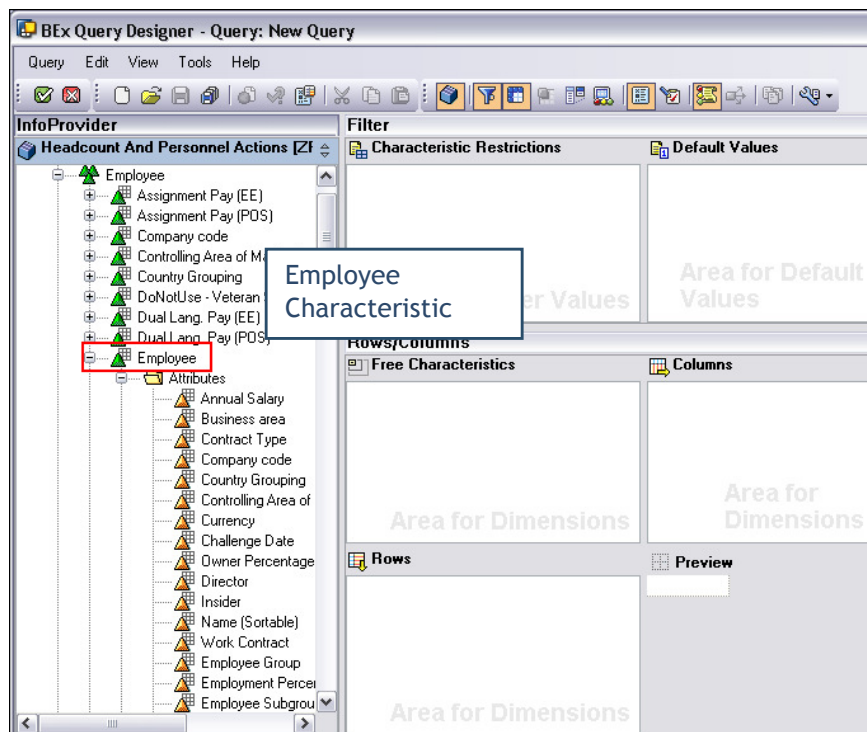


Structural Authorizations

In BW/BI , there are two characteristics identified as confidential InfoObjects:

1. Employee (0EMPLOYEE)
2. Person (0PERSON)

BW/BI security will check Structural Authorizations when these two characteristics are included in queries and reports. This will ensure the user receives results for only the data they have access to.



Structural Authorizations

Employee and Person have display-only attributes that are located in the Attributes folder of the characteristic. These display-only attributes can only be included in a query or report if Employee or Person characteristics are also included.

The image displays two side-by-side screenshots of the BEx Query Designer interface, illustrating structural authorizations for Employee and Person characteristics.

Left Screenshot (Employee):

- InfoProvider:** Headcount And Personnel Actions
- Filter:** Characteristic Restrictions (Empty), Default Values (Employee)
- Rows/Columns:** Free Characteristics (Empty), Columns (Empty)
- Attributes:** A list of attributes is shown, with a red bracket highlighting the "Display-only attributes of Employee selection" (Annual Salary, Business area, Contract Type, Company code, Country Grouping, Controlling Area of Master Data, Currency, Challenge Date, Owner Percentage, Director, Insider, Name (Sortable), Work Contract, Employee Group, Employment Percent, Employee Subgroup, Employment Status, Entry Date, ES Grouping for CAP, Ethnic Origin, External Personal ID, Position).
- Rows:** Employee (Selected), Annual Salary (Selected)
- Preview:** a-Employee, b-Employee

Right Screenshot (Person):

- InfoProvider:** Headcount And Personnel Actions
- Filter:** Characteristic Restrictions (Empty), Default Values (Person)
- Rows/Columns:** Free Characteristics (Empty), Columns (Empty)
- Attributes:** A list of attributes is shown, with a red bracket highlighting the "Display-only attributes of Person selection" (Address Line 1, Address Line 2, Location, Country, Country Grouping, County Code, Date of Birth, Name (Sortable), Gender, Nationality, Language, Telephone 1, Postal Code, Region, First Name, Last Name, SSN).
- Rows:** Person (Selected), Date of Birth (Selected), SSN (Selected)
- Preview:** a-Person, b-Person

Display-only attributes of Employee

Display-only attributes of Person

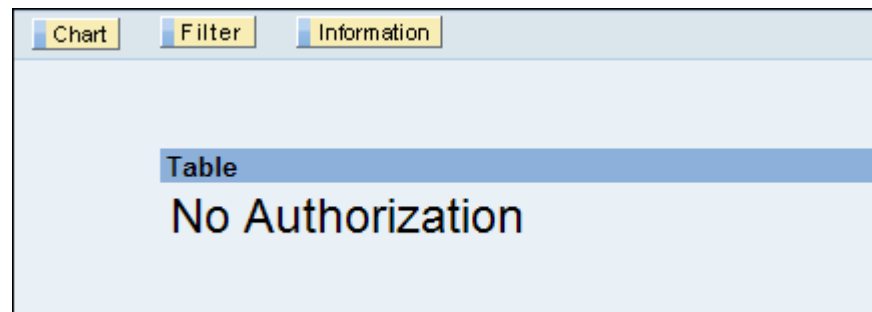
Security Variables

Security Variables are variables in a query or report that check Structural Authorizations. If Employee or Person characteristics are included in a query or report, a Security Variable must also be included.

When a Security Variable is included with the Employee or Person characteristics, BW/BI Security will check Structural Authorizations. This will ensure the user receives results for only the data they have access to.

If a Security Variable is not included with the Employee or Person characteristics, BW/BI Security will return an authorization error for users who do not have statewide access.

An example of the authorization error is displayed below:



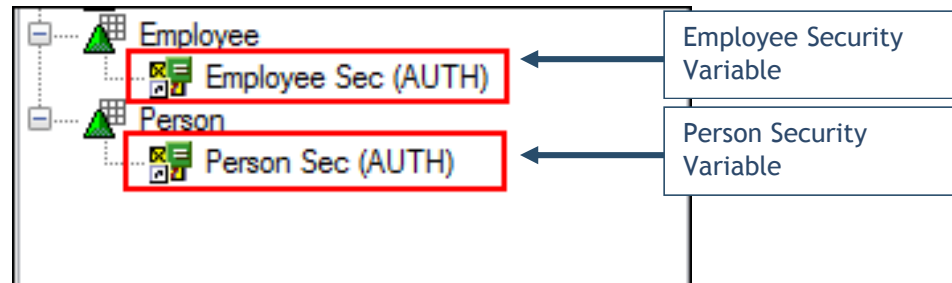
Security Variables

Employee and Person is a “No Display” type of Security Variables:

- No Display: Does not prompt users to select an Employee or Person prior to running the query. Automatically returns data the user has security access to.

Security Variables for Employee and Person include:

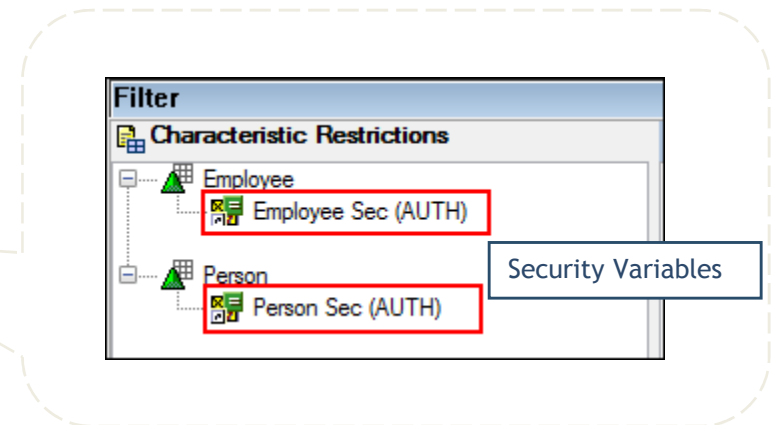
- Employee (0EMPLOYEE):
 - No Display: “Employee Sec (AUTH)”
- Person (0PERSON):
 - No Display: “Person Sec (AUTH)”



Security Variables

The example below shows the results of using Employee and Person characteristics with Security Variables.

The screenshot shows the BEx Query Designer interface. The 'Filter' pane is on the left, showing 'Characteristic Restrictions' with 'Employee Sec (AUTH)' and 'Person Sec (AUTH)' selected. The 'Default Values' pane is on the right, showing 'Employee' and 'Person'. The 'Rows/Columns' pane is in the center, showing 'Free Characteristics' with 'Employee' and 'Person' selected. The 'Preview' pane is on the right, showing a table with columns 'a-Employee', 'a-Person', 'b-Employee', and 'b-Person'.



If the user has authorization to view only one employee, only one employee's data will be displayed.

Sample of an ad hoc query with Confidential InfoObjects and Security Variables



RK_ARI_Test					
Chart Filter Information					
Table					
Employee	20999999	Annual Salary	Person	20999999	SSN
	Doe, Jane E.	70,092.00		Doe, Jane E.	555125555
Overall Result			Result		

Result: Return data for employees the user has access to



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Exercise 4 - Adding Confidential InfoObjects

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Exercise 5 - Deleting an Existing Ad Hoc Query

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